

Notice of Allowability

Application No.

10/727,933

Examiner

Erica E. Cadugan

Applicant(s)

TONCELLI, LUCA

Art Unit

3722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment of 12/27/2006 and interview of 3/12/07.
2. ☒ The allowed claim(s) is/are 1,3-12 and 19.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☒ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date <u>3/22/2005</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Nathan Weber on March 12, 2007.

The application has been amended as follows:

Claim 1 (Currently Amended). A support structure or sleeve, for the use in a machine tool, of the type comprising a tubular body which is able to be associated with a carriage and on which a spindle is mounted, comprising:

a first casing (10) having an axis, which is made of rigid material;
a second tubular casing having the same axis and housed inside the first casing; and
an interspace (30) defined by said first and second casings, the interspace being [filed] filled at least partially by a vibrocompacted agglomerate (40) formed by means of hardening of a mixture consisting of a granulate of stone or ceramic or expanded clay material, or combination thereof, and a resin of the hardening type so that the resultant structure consists of a single piece forming a cavity housing said spindle.

Claim 2 (Canceled).

Claim 3 (Previously Presented). Support structure according to claim 1, further comprising, inside said interspace (30), means for connecting together the internal surface of the first casing (10) and the external surface of the second casing (20).

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Claim 4 (Currently Amended). Support structure according to claim 3, wherein said connection means consist of ring elements (23) which are rigidly fixed to the said internal surface of the first casing (10) and the said external surface of the second casing (20), said ring elements (23) having a height (H) which is equal to the thickness of said interspace (30).

Claim 5 (Currently Amended). Support structure according to claim 4, wherein each of said ring elements (23) surrounds a coaxial hole (22) having a diameter (D.sub.1) not greater than its own diameter (D.sub.2), said holes (22) being provided at least in [the surface of] the second casing (20).

Claim 6 (Currently Amended). Support structure according to claim 1, wherein the internal surface of the said first casing (10) and/or the external surface of the said second casing (20) are roughened[, for example, sandblasted,] in order to [favour] favor fixing of the [layer of] agglomerate.

Claim 7 (Currently Amended). Support structure according to claim 1, wherein the internal surface of the said first casing (10) and/or the external surface of the said second casing (20) are provided with means[, such as for example ribs parallel and/or perpendicular to the axis of the said structure, in order to favour] for favoring the gripping of the agglomerate.

Claim 8 (Original). Support structure according to claim 1, wherein said first casing (10) is made of sheet steel.

Claim 9 (Previously Presented). Support structure according to claim 1, wherein said second casing (20) is made of sheet steel.

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Claim 10 (Currently Amended). Support structure according to claim 9, wherein said first casing (10) is made of sheet steel, and wherein the sheet steel from which the said second casing (20) is made is thinner than the sheet steel from which the said first casing (10) is made.

Claim 11 (Currently Amended). Support structure according to claim 1, wherein said second casing (20) is made of [moulded] molded plastic material.

Claim 12 (Currently Amended). Support structure according to claim 1, further comprising pipes (32, 34) for circulation of a cooling fluid embedded in the said [layer of] agglomerate (40).

Claims 13-18 (Canceled).

Claim 19 (New). Support structure according to claim 6, wherein the roughening of the internal surface of the said first casing (10) and/or the external surface of the said second casing (20) is achieved by sandblasting.

2. The following is an examiner's statement of reasons for allowance:

References such as U.S. Pat. No. 4,670,208 to Koblischek et al. generically teach the use of vibrocompacted aggregates for machine tool supports, such as beds or columns (see at least col. 4, lines 1-28 and the figures). Koblischek mentions other references that also generically teach machine supports made of a mixture including sand or gravel or stone and resin (col. 1, lines 13-43, for example).

However, none of the prior art of record provides a teaching of the specific structure claimed including a support structure or sleeve "for the use in a machine tool", and wherein the specific first and second casings and filled interspace (filled with the claimed materials) form a resultant structure that consists of a single piece "forming a cavity housing said spindle" (of the

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machine tool) as set forth in independent claim 1, nor is there any combinable teaching that would reasonably and absent impermissible hindsight motivate one having ordinary skill in the art to so modify the teachings of Koblischek.

The aforementioned prior art being representative of the closest prior art of record, for at least the foregoing reasoning, the prior art of record neither anticipates nor renders obvious the present invention as set forth in independent claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Information Disclosure Statement

3. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

See page 7, line 3, for example.

It is noted that this is not any sort of objection, but is merely a comment to notify Applicant that these references have not been considered and will not be printed on the face of any patent issuing from this application unless they have been cited on form PTO-892.

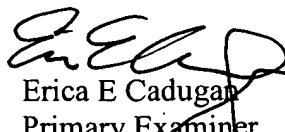
Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erica E. Cadugan whose telephone number is (571) 272-4474. The examiner can normally be reached on M-F, 6:30 a.m. to 4:00 p.m., alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica S. Carter can be reached on (571) 272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Erica E Cadugan
Primary Examiner
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